p1029: Box multiplication of linear binomials (v1)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(2x + 5)$ and $(9x + 3)$.

*	2x	5
9x	$18x^2$	45x
3	6x	15

ANSWER: $18x^2 + 51x + 15$

Question 2

Use the box method to multiply $(-6x + 2)$ and $(8x + 9)$.

*	$-6x$	2
$8x$	$-48x^2$	$16x$
9	$-54x$	18

ANSWER: $-48x^2 - 38x + 18$

Question 3

Use the box method to multiply $(-2x + 5)$ and $(9x + 8)$.

*	$-2x$	5
$9x$	$-18x^2$	$45x$
8	$-16x$	40

ANSWER: $-18x^2 + 29x + 40$